

CHAPTER 3. EMPLOYMENT AND ACTIVE MINING OPERATIONS: MSHA DATA

This chapter presents MSHA data on mine employment and active mining operations during 1986-1995. Figures 3-1 through 3-10 show, for each commodity, the location of mine operations in 1995, and employee hours and active mining operations by year during 1986-1995 for mine operators.

For coal and nonmetal operators, the number of active mining operations and the number of employee hours decreased over the 10-year period. For metal operators, the number of active operations decreased, while the number of employee hours increased. For stone and sand and gravel operators, the number of active operations and the number of employee hours remained about the same.

Figures 3-11 and 3-12 show that over the 10-year period, there was an increase in the proportion of hours worked by contractors in coal mining, while the overall employment decreased. For metal, nonmetal, stone, and sand and gravel combined, the proportion of contractor hours increased, with overall employment also increasing.

Table 3-1 shows the distribution of hours worked during 1986-1995 by commodity and type of operation. For coal, the majority of hours worked were in underground mines. For metal, nonmetal, and stone, the largest number of hours worked were in mills and preparation plants. For sand and gravel, all work hours other than office were in surface mines.

Table 3-1.—Number and percent of employee hours (in millions) by commodity and type of operation for operators, 1986-1995.

Type of operation	Coal		Metal		Nonmetal		Stone		Sand and gravel	
	Hours in millions	(%)	Hours in millions	(%)	Hours in millions	(%)	Hours in millions	(%)	Hours in millions	(%)
Underground mines										
Underground operations	1,210.50	(46.0)	127.85	(13.2)	70.44	(11.2)	30.83	(2.0)	NA	NA
Surface operations	124.10	(4.7)	33.70	(3.4)	12.82	(2.0)	8.04	(<1.0)	NA	NA
Surface mines										
Strip	846.59	(32.2)	307.01	(31.8)	121.39	(19.3)	572.40	(37.0)	490.11	(72.2)
Auger	6.54	(<1.0)	NA	NA	NA	NA	NA	NA	NA	NA
Culm bank	6.58	(<1.0)	NA	NA	NA	NA	NA	NA	NA	NA
Dredge	1.05	(<1.0)	8.79	(<1.0)	1.71	(<1.0)	3.05	(<1.0)	93.02	(13.7)
Other surface	NA	NA	2.95	(<1.0)	.02	(<1.0)	NA	NA	NA	NA
Shops	20.72	(1.0)	8.30	(<1.0)	.14	(<1.0)	4.35	(<1.0)	NA	NA
Mills/preparation plants	283.60	(10.8)	370.48	(38.4)	337.93	(53.7)	720.39	(46.6)	NA	NA
Office	130.18	(4.9)	106.65	(11.0)	84.91	(13.5)	206.38	(13.4)	95.24	(14.0)
Total	2,629.86	(100.0)	965.77	(100.0)	629.35	(100.0)	1,545.40	(100.0)	678.37	(100.0)

NA - Not applicable; operation does not exist for this commodity, or breakdown of hours is unavailable.

Source: Mine Safety and Health Administration data.

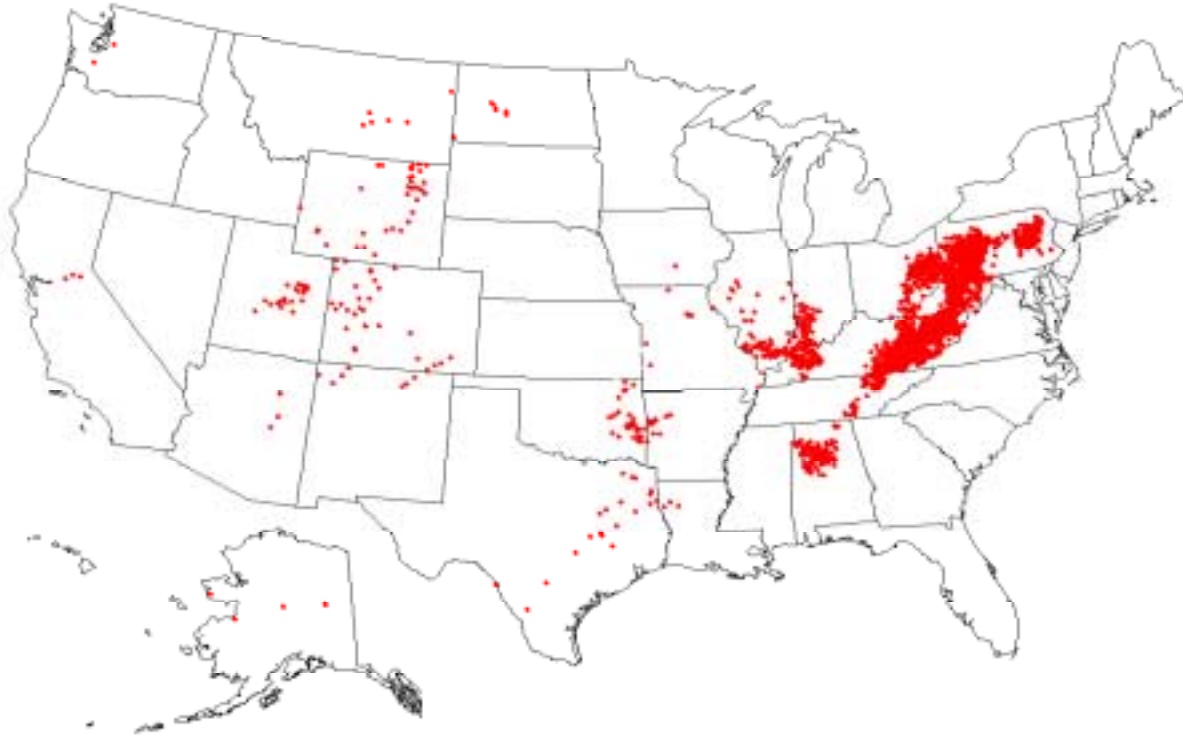


Figure 3-1.—Locations of active mining operations, coal industry, 1995. (Source: MSHA)

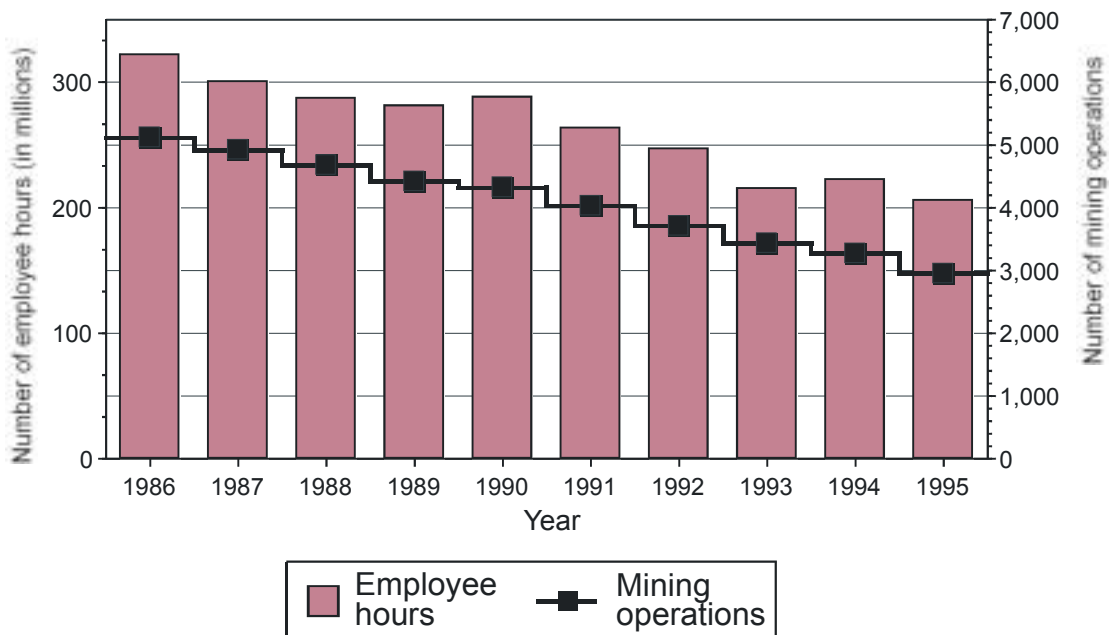


Figure 3-2.—Coal operators: number of employee hours in millions and number of active mining operations by year, 1986-1995. (Source: MSHA)



Figure 3-3.—Locations of active metal mining operations, metal industry, 1995. (Source: MSHA)

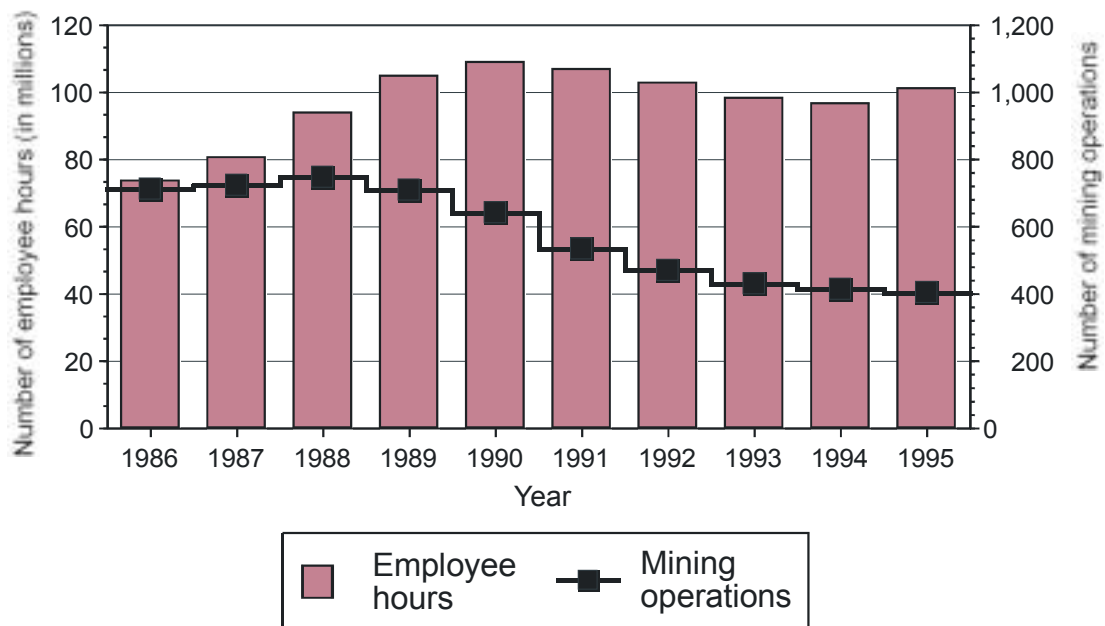


Figure 3-4.—Metal operators: number of employee hours in millions and number of active mining operators by year, 1986-1995. (Source: MSHA)



Figure 3-5.—Locations of active mining operations, nonmetal industry, 1995. (Source: MSHA)

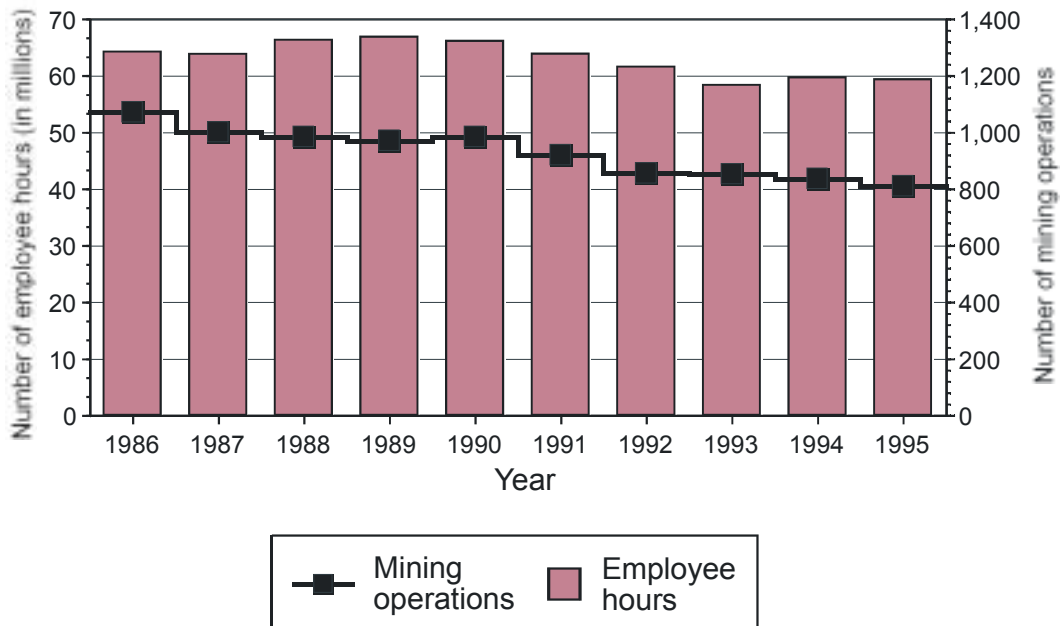


Figure 3-6.—Nonmetal operators: number of employee hours in millions and number of active mining operations by year, 1986-1995. (Source: MSHA)



Figure 3-7.—Locations of active mining operations, stone industry, 1995. (Source: MSHA)

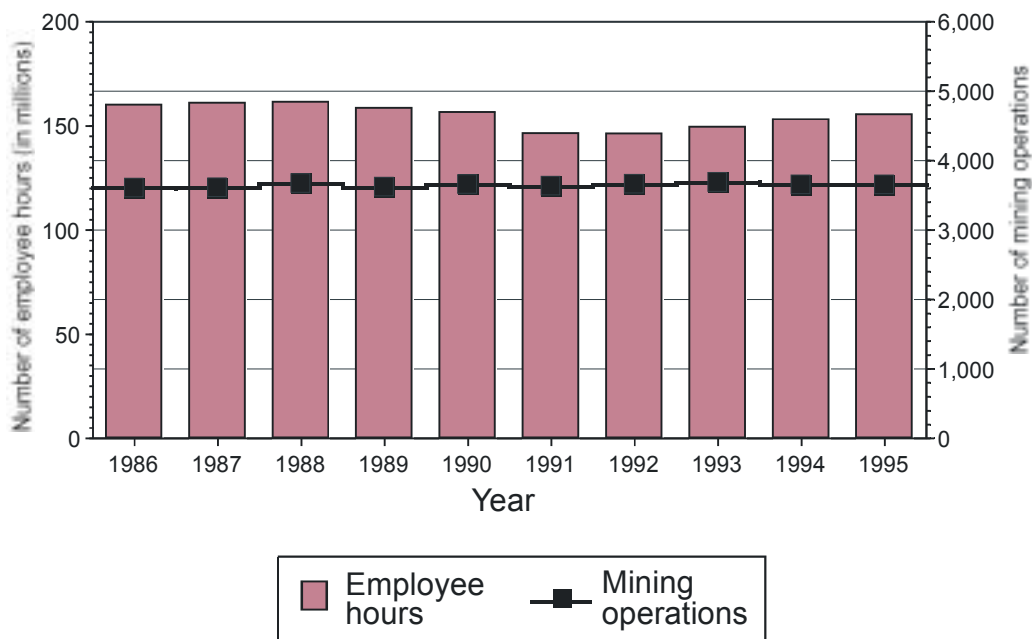


Figure 3-8.—Stone operators: number of employee hours in millions and number of active mining operations by year, 1986-1995. (Source: MSHA)



Figure 3-9.—Locations of active mining operations, sand and gravel industry, 1995. (Source: MSHA)



Figure 3-10.—Sand and gravel operators: number of employee hours in millions and number of active mining operations by year, 1986-1995. (Source: MSHA)

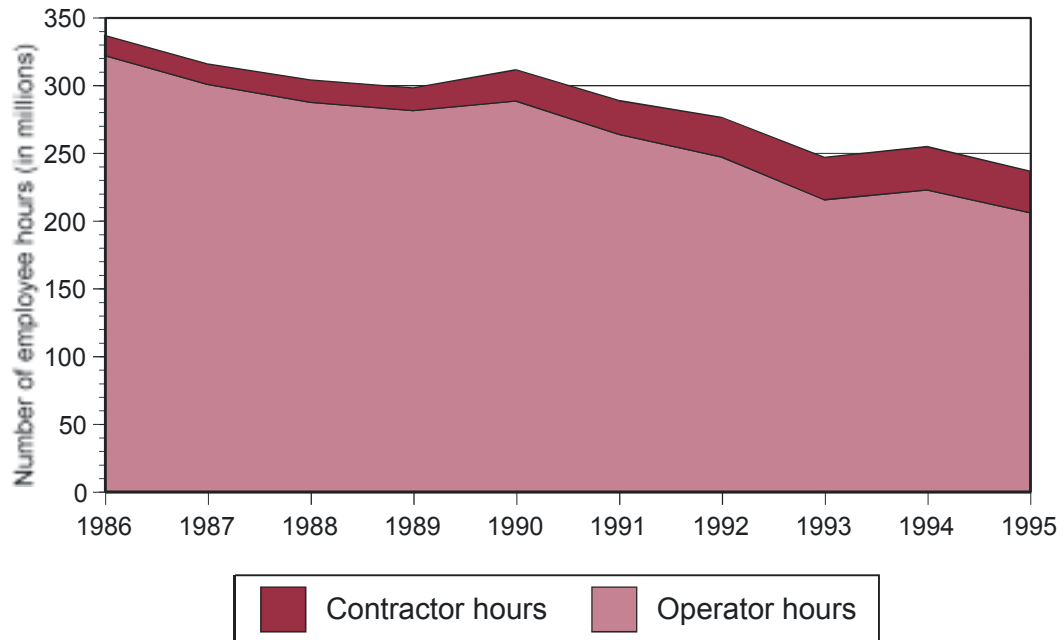


Figure 3-11.—Coal industry: number of employee hours (in millions) for operators and contractors by year. (Source: MSHA)

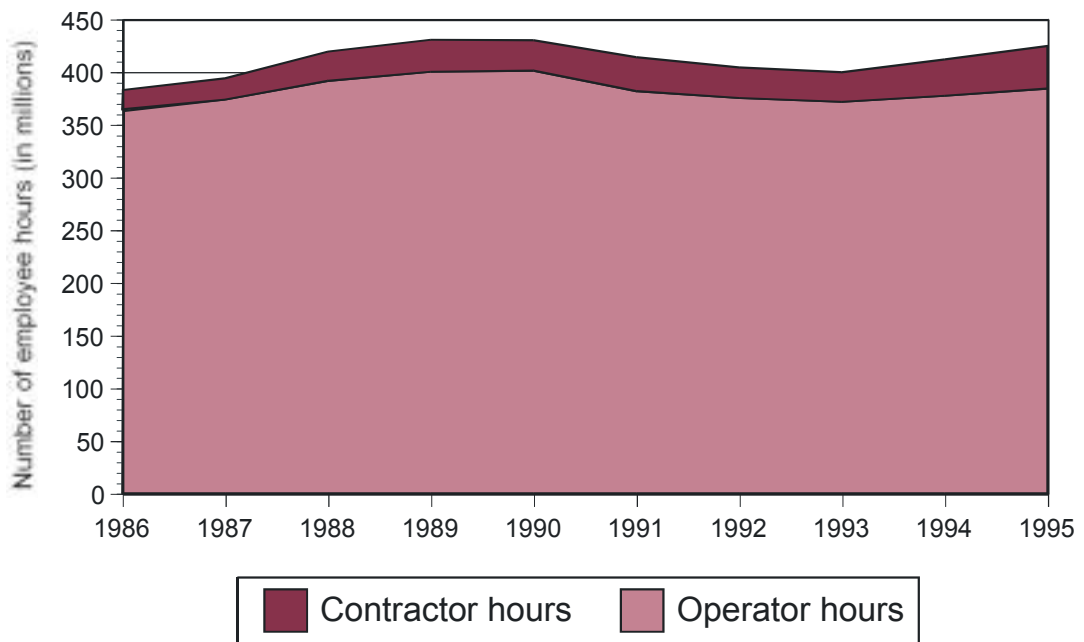


Figure 3-12.—Metal, nonmetal, stone, and sand and gravel industries: number of employee hours (in millions) for operators and contractors by year, 1986-1995. (Source: MSHA)